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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/706,038

11/13/2003

Satoshi Ishikawa

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EXAMINER

FELTON, MICHAEL J

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

03/30/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/706,038	Applicant(s) ISHIKAWA ET AL.	
	Examiner MICHAEL J. FELTON	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/7/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4,6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4,6 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/7/2009 have been fully considered but they are not persuasive.

In response to applicant's arguments, the recitation twin-wire has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

2. The applicant alleges that difference in calcium carbonate between various layers of the paper are small. The applicant admits on the record (see Remarks, page 4) that the prior art contains a calcium carbonate and that it "gradually decreases toward the wire surface of its wrapper." (emphasis added by applicant). The examiner believes that this gradual decrease would result in only a small difference in calcium carbonate as claimed. In addition, this is the result of a process step not disclosed in the prior art and therefore, the prior art does not inherently have this gradient.

3. In addition, no specific sizes of the layers and regions of the paper are claimed. Therefore, the surface regions together could make up 99% of the paper mass, leaving

a 1% center region. Or the layers or regions could be adjusted so that there is no difference in calcium carbonate concentration when comparing the layers.

4. The applicant alleges that because the prior art paper was manufactured using a different process, that the product cannot be the same (see Remarks 1/7/2009, page 7, last paragraph – page 8). This is a product by process argument, but the claims are not in product by process form. Therefore, the process used is not being considered for patentability. Should the claims be considered to be product by process, the examiner believes that no evidence has been presented that the product of the prior art is different from the product as currently claimed. In particular, the applicant argues that one of ordinary skill would not use a twin wire former to make a cigarette wrapper. First, this argument is moot due to the disclosure by the applicant that even using the more typical Fourdeiner paper making system would produce only a gradual change in concentration through the paper layers. Second, there is no evidence presented that one of ordinary skill would not use a twin-wire system to make cigarette paper, as it is a type of wrapping paper and encompasses a wide range of porosities. Third, Yamazaki discloses making handsheets, which is an extremely rapid method of making paper that would not produce the gradient of calcium carbonate that the applicant has argued would be formed on a Fourdeiner paper machine. Therefore, it would have been obvious that the handsheet made by Yamazaki would have a very uniform distribution of calcium carbonate.

5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

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combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, there are several known paper making techniques. Yamazaki teach one technique, making a handsheet. Smook is used to show that there are other known techniques, and that twin wire formers are used to make tissue and wrappers.

6. The applicant alleges that the rejections made under 35 USC 112 were agreed to be withdrawn during the interview on 12/17/2008. This is not indicated on the Interview Summary entered in the record on 12/22/2008. While some of the 35 USC 112 rejections were withdrawn, the claims continue to provide limitations that do not have basis in the specification and that appear to introduce different broad and narrow limitations in the same claim. Therefore, these rejections have been maintained.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 6 and 2-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not provide support for the claim limitation "wherein the percentage of ash content in a surface layer on each of the topside and a bottom side of the wrapper paper is lower than a total ash content in percentage of the wrapper paper". In particular, paragraph 0033 of the specification describes the product of the invention with a similar ash content throughout the paper, not with a higher or lower percentage of ash content in the surface regions. In particular:

In the wrapper paper manufactured by the twin wire type paper making machine, the difference in the content of the loading material between the inner region and the surface region of the paper layer is small and, thus, the difference in the loading material content between the entire paper layer and each layer is considerably small (paragraph 0033).

There appears to be no indication that the surface layers have a lower percentage than then any other portion of the paper as currently being claimed.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 6, 7 and 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board

of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 6 recites the broad recitation that the top side and bottom side have lower than a total ash content in percentage, and the claim also recites that the top side and bottom side have ash content not higher than 35% by mass, which is the narrower statement of the range/limitation.

12. The term "small" and "considerably small" in claims 6 and 7 is a relative term which renders the claim indefinite. The term "small" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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14. Claims 2-4 and 6-7 rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent office publication EP 0791688 to Yamazaki ("Yamazaki") in view of Smook (Handbook for Pulp & Paper Technologies, section 20.7).

15. Regarding claim 6, 2-4, and 7, Yamazaki teaches a cigarette paper with at least 30 g/m² of calcium carbonate [paragraphs 16 and 34] and at least 3% by mass of potassium or sodium citrate burn adjusting agents [table 4; paragraph 68], but does not indicate the ash content of a top or bottom surface layer, nor does Yamazaki indicate that the difference in calcium carbonate content between an inner region and a surface region of the paper layer would be small, and differences in calcium carbonate concentration throughout the paper would be small. However, the examiner believes that the ash content of the paper of Yamazaki would be inherent because Yamazaki teaches a paper having essentially the same composition. (see MPEP citation below).

"[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). MPEP section 2112.

16. In addition, although Yamazaki disclose making handsheets that are commonly used to test papers. It would have been obvious to one of ordinary skill in the art that the handsheet produced would not have had significant variation between surface and interior regions as the handsheet process is very rapid. In addition, it would have been obvious to one of ordinary skill that the paper of Yamazaki could be made using standard paper production equipment. One of the well known methods of making tissue

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papers (a category that includes cigarette papers), includes twin-wire formers (Smook, page 316-317 and 319, especially "Modern Tissue Formers" on page 317). Therefore, the paper of Yamazaki, produced on standard paper making machines, would obviously have the same attributes as that of the instant invention.

In the event any differences can be shown for the product of claim(s) 2-4 and 6, as opposed to the product taught by the reference Yamazaki, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of showing of unexpected results.

17. However, the process as disclosed in the specification of using a twin-wire paper forming machine to for the cigarette wrapper is met by Smook as applied to claim 6 above (see Smook, page 316-317, especially "Modern Tissue Formers" on page 317).

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. FELTON whose telephone number is (571)272-4805. The examiner can normally be reached on Monday to Friday, 7:30 AM to 4:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip C. Tucker can be reached on 571-272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. J. F./
Examiner, Art Unit 1791

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791